

ABSTRACT OF THE DISCLOSURE

An integrated blade cooler for electronic components comprises a blower with a radial impeller and a casing, an electric drive with a magnetic rotor and a stator, and a heatsink with heat-exchanging means and a base providing thermal contact with said electronic component and said heat-exchanging means. The casing of the impeller has an inlet and an outlet; said impeller comprises blades, a backplate disk and an axis of rotation; and the heat-exchanging means of the heatsink is clothed in a cover plate with an outflow opening that being coincided with said inlet so that cooling gas flows through said heat-exchanging means, said blower inlet, said radial impeller and said blower outlet in a series way. The stator of the electric drive is made as a part of said casing of the blower so that said outflow opening serves as said inlet, and the radial impeller comprises magnetic means serving as a magnetic rotor of said electric drive. The stator is made as printed circuit board. At least part of said cover plate is made as a part of said casing so that said outflow opening serves as said inlet of the blower. The stator is located perpendicularly to the axis of rotation, and said magnetic means is magnetized in the direction parallel to said axis of rotation. The heatsink has a recess on the side of an outflow opening, and the blower is located in said recess.